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6. A hybrid digital cross-connect system (DCS)/SONET integrated SONET ring structure, comprising:

a plurality of add-drop multiplexers (ADMs) arranged according to a ring topology and managed as a ring by a SONET element management system (EMS), wherein at least one of said ADMs forming said SONET ring is included within an input/output module of a hybrid DCS, said input/output modules, each of said input/output module further comprising a DCS port operatively coupled to said ADM via a digital link.

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8. Apparatus, comprising:  
a SONET element management system (EMS), said SONET EMS being  
adapted to manage, as a network ring structure, a SONET ring formed using at  
least one add-drop multiplexer (ADM) included within a hybrid digital cross-  
20 connect system (DCS).

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10. The apparatus of claim 15, wherein said digital link comprises one of an STS-1 and STS-3 digital link.

11. In a communications system comprising a digital cross-connect system  
30 (DCS) including a SONET add/drop multiplexer (ADM), a method of utilizing  
said ADM as a network element within a SONET ring such that said SONET

characterizing said DCS including said ADM as comprising a logical DCS network element and a logical ADM network element, said logical DCS network element communicating with said logical ADM network element via a digital link; and

12. The method of claim 11, wherein said digital link comprises one of an STS-1 and STS-3 digital link.

- identifying each network element within a network to be managed;
- determining if hybrid DCS/SONET network structures are present in the network;

14. The method of claim 13, further comprising the step of:  
inserting an additional ADM between a hybrid DCS/SONET structure  
and a hybrid ring utilizing an ADM network element within said hybrid  
DCS/SONET structure.

15. The method of claim 13, wherein said DCS network elements and ADM network elements are decoupled via a digital link.

of claim 15 wherein said digital link.

adapting a communication network to a ring structure by:

each network element within the network is a homogeneous network structure;

non-homogeneous network structure;

if hybrid DCS/SONET network structure;

managed;

from said determined DCS/SONET network structure;

multiplexers (ADMs) used in the network;

using a DCS element managed;

managed; and

using a SONET element managed;

rein ADMs forming a ring structure;

work ring structures.

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identifying homogeneous network structures within the network to be

identifying non-homogeneous network structures within the network to

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decoupling, from said determined DCS/SONET network structures, those add-drop multiplexers (ADMs) used to form hybrid ring networks;

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managing, using a SONET element manager, ADMs within said network to be managed, wherein ADMs forming ring structures being managed as homogeneous network ring structures.

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